

# Ilya Karlin

## List of Publications by Year in descending order

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171  
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6,829  
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171  
all docs

171  
docs citations

171  
times ranked

2143  
citing authors

#	ARTICLE	IF	CITATIONS
1	Perfect entropy functions of the Lattice Boltzmann method. Europhysics Letters, 1999, 47, 182-188.	2.0	328
2	Kinetic boundary conditions in the lattice Boltzmann method. Physical Review E, 2002, 66, 026311.	2.1	303
3	Minimal entropic kinetic models for hydrodynamics. Europhysics Letters, 2003, 63, 798-804.	2.0	242
4	Method of invariant manifold for chemical kinetics. Chemical Engineering Science, 2003, 58, 4751-4768.	3.8	208
5	Colloquium: Role of the Htheorem in lattice Boltzmann hydrodynamic simulations. Reviews of Modern Physics, 2002, 74, 1203-1220.	45.6	179
6	Maximum Entropy Principle for Lattice Kinetic Equations. Physical Review Letters, 1998, 81, 6-9.	7.8	145
7	Entropy and Galilean Invariance of Lattice Boltzmann Theories. Physical Review Letters, 2006, 97, 190601.	7.8	136
8	Hydrodynamics beyond Navier-Stokes: Exact Solution to the Lattice Boltzmann Hierarchy. Physical Review Letters, 2007, 98, 124502.	7.8	136
9	Lattices for the lattice Boltzmann method. Physical Review E, 2009, 79, 046701.	2.1	135
10	Entropic Lattice Boltzmann Method for Multiphase Flows. Physical Review Letters, 2015, 114, 174502.	7.8	135
11	Constructive methods of invariant manifolds for kinetic problems. Physics Reports, 2004, 396, 197-403.	25.6	128
12	Entropic Lattice Boltzmann Models for Hydrodynamics in Three Dimensions. Physical Review Letters, 2006, 97, 010201.	7.8	116
13	Single relaxation time model for entropic lattice Boltzmann methods. Physical Review E, 2002, 65, 056312.	2.1	106
14	Lattice Boltzmann method for thermal flow simulation on standard lattices. Physical Review E, 2007, 76, 016702.	2.1	105
15	Entropy Function Approach to the Lattice Boltzmann Method. Journal of Statistical Physics, 2002, 107, 291-308.	1.2	103
16	Gibbs' principle for the lattice-kinetic theory of fluid dynamics. Physical Review E, 2014, 90, 031302.	2.1	94
17	Consistent Lattice Boltzmann Method. Physical Review Letters, 2005, 95, 260605.	7.8	92
18	Stabilization of the lattice Boltzmann method by the Htheorem: A numerical test. Physical Review E, 2000, 62, 7999-8003.	2.1	83

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19	Entropic lattice Boltzmann model for compressible flows. <i>Physical Review E</i> , 2015, 92, 061301.	2.1	82
20	Galilean-invariant lattice-Boltzmann models with Htheorem. <i>Physical Review E</i> , 2003, 68, 025103.	2.1	80
21	Water ring-bouncing on repellent singularities. <i>Soft Matter</i> , 2018, 14, 2227-2233.	2.7	79
22	Lattice Boltzmann model for the simulation of multicomponent mixtures. <i>Physical Review E</i> , 2007, 76, 046703.	2.1	72
23	Entropic multirelaxation lattice Boltzmann models for turbulent flows. <i>Physical Review E</i> , 2015, 92, 043309.	2.1	72
24	Lattice Boltzmann method for direct numerical simulation of turbulent flows. <i>Journal of Fluid Mechanics</i> , 2010, 656, 298-308.	3.4	71
25	Invariant grids for reaction kinetics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 333, 106-154.	2.6	70
26	Entropic lattice Boltzmann method for microflows. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006, 359, 289-305.	2.6	69
27	Method of invariant manifolds and regularization of acoustic spectra. <i>Transport Theory and Statistical Physics</i> , 1994, 23, 559-632.	0.4	67
28	Consistent two-population lattice Boltzmann model for thermal flows. <i>Physical Review E</i> , 2013, 88, 063310.	2.1	64
29	General characteristic-based algorithm for off-lattice Boltzmann simulations. <i>Europhysics Letters</i> , 2006, 75, 434-440.	2.0	62
30	Entropic multi-relaxation time lattice Boltzmann model for complex flows. <i>Journal of Fluid Mechanics</i> , 2016, 801, 623-651.	3.4	62
31	Factorization symmetry in the lattice Boltzmann method. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2010, 389, 1530-1548.	2.6	60
32	Ternary Free-Energy Entropic Lattice Boltzmann Model with a High Density Ratio. <i>Physical Review Letters</i> , 2018, 120, 234501.	7.8	60
33	Grad's approximation for missing data in lattice Boltzmann simulations. <i>Europhysics Letters</i> , 2006, 74, 215-221.	2.0	59
34	Grad's approximation for moving and stationary walls in entropic lattice Boltzmann simulations. <i>Journal of Computational Physics</i> , 2015, 295, 340-354.	3.8	58
35	Short-Wave Limit of Hydrodynamics: A Soluble Example. <i>Physical Review Letters</i> , 1996, 77, 282-285.	7.8	57
36	Drops bouncing off macro-textured superhydrophobic surfaces. <i>Journal of Fluid Mechanics</i> , 2017, 824, 866-885.	3.4	57

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37	General approach to constructing models of the Boltzmann equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994, 206, 401-420.	2.6	56
38	Corrections and enhancements of quasi-equilibrium states. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2001, 96, 203-219.	2.4	54
39	Lattice Boltzmann method for simulation of compressible flows on standard lattices. <i>Physical Review E</i> , 2008, 78, 016704.	2.1	53
40	Dynamic correction to moment approximations. <i>Physical Review E</i> , 1998, 57, 1668-1672.	2.1	52
41	Multispeed entropic lattice Boltzmann model for thermal flows. <i>Physical Review E</i> , 2014, 90, 043306.	2.1	51
42	Lattice Boltzmann model for compressible flows on standard lattices: Variable Prandtl number and adiabatic exponent. <i>Physical Review E</i> , 2019, 99, 013306.	2.1	51
43	Hydrodynamics from Grad's equations: What can we learn from exact solutions?. <i>Annalen Der Physik</i> , 2002, 11, 783-833.	2.4	47
44	Entropic lattice Boltzmann method for multiphase flows: Fluid-solid interfaces. <i>Physical Review E</i> , 2015, 92, 023308.	2.1	47
45	Kinetic theory of turbulence modeling: smallness parameter, scaling and microscopic derivation of Smagorinsky model. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 338, 379-394.	2.6	46
46	Simulation of binary droplet collisions with the entropic lattice Boltzmann method. <i>Physics of Fluids</i> , 2016, 28, 022106.	4.0	46
47	Quasi-equilibrium lattice Boltzmann method. <i>European Physical Journal B</i> , 2007, 56, 135-139.	1.5	45
48	Simulation of turbulent flows with the entropic multirelaxation time lattice Boltzmann method on body-fitted meshes. <i>Journal of Fluid Mechanics</i> , 2018, 849, 35-56.	3.4	45
49	Conjugate heat transfer with the entropic lattice Boltzmann method. <i>Physical Review E</i> , 2016, 94, 013305.	2.1	44
50	Particles on Demand for Kinetic Theory. <i>Physical Review Letters</i> , 2018, 121, 130602.	7.8	44
51	Thermodynamic parameterization. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1992, 190, 393-404.	2.6	43
52	Lattice Boltzmann simulation of catalytic reactions. <i>Physical Review E</i> , 2008, 78, 046711.	2.1	43
53	Hilbert's 6th Problem: exact and approximate hydrodynamic manifolds for kinetic equations. <i>Bulletin of the American Mathematical Society</i> , 2013, 51, 187-246.	1.5	43
54	Entropic lattice Boltzmann model for gas dynamics: Theory, boundary conditions, and implementation. <i>Physical Review E</i> , 2016, 93, 063302.	2.1	43

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55	Hydrodynamics beyond Navier-Stokes: The slip flow model. <i>Physical Review E</i> , 2008, 78, 016705.	2.1	42
56	Lattice Kinetic Theory in a Comoving Galilean Reference Frame. <i>Physical Review Letters</i> , 2016, 117, 010604.	7.8	42
57	Reduced description in the reaction kinetics. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 275, 361-379.	2.6	39
58	Family of additive entropy functions out of thermodynamic limit. <i>Physical Review E</i> , 2003, 67, 016104.	2.1	39
59	Entropic lattice Boltzmann method for turbulent flow simulations: Boundary conditions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2013, 392, 1925-1930.	2.6	39
60	Grid refinement for entropic lattice Boltzmann models. <i>Physical Review E</i> , 2016, 94, 053311.	2.1	39
61	Invariance principle for extension of hydrodynamics: Nonlinear viscosity. <i>Physical Review E</i> , 1997, 55, 1573-1576.	2.1	35
62	Thermohydrodynamic lattice BGK schemes with non-perturbative equilibria. <i>Europhysics Letters</i> , 1998, 41, 279-284.	2.0	34
63	Generating moment equations in the Doi model of liquid-crystalline polymers. <i>Physical Review E</i> , 1999, 60, 5783-5787.	2.1	34
64	Canonical distribution functions in polymer dynamics. (II). Liquid-crystalline polymers. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 319, 134-150.	2.6	34
65	Thermodynamic Theory of Incompressible Hydrodynamics. <i>Physical Review Letters</i> , 2005, 94, 080602.	7.8	34
66	Lattice Boltzmann method with restored Galilean invariance. <i>Physical Review E</i> , 2009, 79, 066702.	2.1	34
67	Entropy production analysis for mechanism reduction. <i>Combustion and Flame</i> , 2014, 161, 1507-1515.	5.2	34
68	Transitional flows with the entropic lattice Boltzmann method. <i>Journal of Fluid Mechanics</i> , 2017, 824, 388-412.	3.4	34
69	Coupling of the model reduction technique with the lattice Boltzmann method for combustion simulations. <i>Combustion and Flame</i> , 2010, 157, 1833-1849.	5.2	33
70	Canonical distribution functions in polymer dynamics. (I). Dilute solutions of flexible polymers. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 315, 367-385.	2.6	31
71	Ehrenfest's argument extended to a formalism of nonequilibrium thermodynamics. <i>Physical Review E</i> , 2001, 63, 066124.	2.1	30
72	Polymer dynamics in wall turbulent flow. <i>Europhysics Letters</i> , 2002, 58, 616-622.	2.0	30

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73	Numerical stability of Entropic versus positivity-enforcing Lattice Boltzmann schemes. <i>Mathematics and Computers in Simulation</i> , 2006, 72, 227-231.	4.4	30
74	Relativistic lattice Boltzmann model with improved dissipation. <i>Physical Review D</i> , 2013, 87, .	4.7	29
75	n-Heptane/air combustion in perfectly stirred reactors: Dynamics, bifurcations and dominant reactions at critical conditions. <i>Combustion and Flame</i> , 2015, 162, 3166-3179.	5.2	29
76	Structure and approximations of the chapman-enskog expansion for the linearized grad equations. <i>Transport Theory and Statistical Physics</i> , 1992, 21, 101-117.	0.4	28
77	Equilibria for discrete kinetic equations. <i>Physical Review E</i> , 1998, 58, R4053-R4056.	2.1	28
78	Multispeed models in off-lattice Boltzmann simulations. <i>Physical Review E</i> , 2008, 77, 025701.	2.1	28
79	Quasiequilibrium lattice Boltzmann models with tunable bulk viscosity for enhancing stability. <i>Physical Review E</i> , 2010, 81, 016702.	2.1	28
80	Exact summation of the Chapman-Enskog expansion from moment equations. <i>Journal of Physics A</i> , 2000, 33, 8037-8046.	1.6	27
81	Combustion simulation via lattice Boltzmann and reduced chemical kinetics. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P06013.	2.3	27
82	Simulation of binary mixtures with the lattice Boltzmann method. <i>Physical Review E</i> , 2006, 74, 056707.	2.1	26
83	Kinetically reduced local Navier-Stokes equations for simulation of incompressible viscous flows. <i>Physical Review E</i> , 2007, 76, 066704.	2.1	26
84	Fluid-structure interaction with the entropic lattice Boltzmann method. <i>Physical Review E</i> , 2018, 97, 023305.	2.1	26
85	Scattering rates versus moments: Alternative Grad equations. <i>Physical Review E</i> , 1996, 54, R3109-R3112.	2.1	25
86	Quasi-equilibrium closure hierarchies for the Boltzmann equation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006, 360, 325-364.	2.6	24
87	Comment on "Numerics of the lattice Boltzmann method: Effects of collision models on the lattice Boltzmann simulations". <i>Physical Review E</i> , 2011, 84, 068701.	2.1	24
88	Adaptive simplification of complex multiscale systems. <i>Physical Review E</i> , 2011, 83, 036706.	2.1	24
89	Lattice Boltzmann Method for Irregular Grids. <i>Physical Review Letters</i> , 1999, 82, 5245-5248.	7.8	23
90	The universal limit in dynamics of dilute polymeric solutions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 275, 152-177.	2.6	23

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91	Uniqueness of thermodynamic projector and kinetic basis of molecular individualism. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 336, 391-432.	2.6	23
92	Entropic lattice Boltzmann method for simulation of thermal flows. <i>Mathematics and Computers in Simulation</i> , 2006, 72, 179-183.	4.4	23
93	Duality in nonextensive statistical mechanics. <i>Physical Review E</i> , 2002, 65, 036128.	2.1	22
94	From hyperbolic regularization to exact hydrodynamics for linearized Grad's equations. <i>Physical Review E</i> , 2007, 75, 051204.	2.1	22
95	Quasi-equilibrium grid algorithm: Geometric construction for model reduction. <i>Journal of Computational Physics</i> , 2008, 227, 5535-5560.	3.8	22
96	Droplet Collision Simulation by a Multi-Speed Lattice Boltzmann Method. <i>Communications in Computational Physics</i> , 2011, 9, 1219-1234.	1.7	22
97	Extended lattice Boltzmann model for gas dynamics. <i>Physics of Fluids</i> , 2021, 33, .	4.0	22
98	Contactless prompt tumbling rebound of drops from a sublimating slope. <i>Physical Review Fluids</i> , 2016, 1, .	2.5	22
99	Relaxational trajectories: global approximations. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1996, 231, 648-672.	2.6	21
100	Exact Linear Hydrodynamics from the Boltzmann Equation. <i>Physical Review Letters</i> , 2008, 100, 214503.	7.8	21
101	Irreversibility in the short memory approximation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2003, 327, 399-424.	2.6	20
102	Semi-Lagrangian lattice Boltzmann model for compressible flows on unstructured meshes. <i>Physical Review E</i> , 2020, 101, 023311.	2.1	20
103	Kinetically reduced local Navier-Stokes equations: An alternative approach to hydrodynamics. <i>Physical Review E</i> , 2006, 74, 035702.	2.1	19
104	Wetting boundaries for a ternary high-density-ratio lattice Boltzmann method. <i>Physical Review E</i> , 2019, 100, 013308.	2.1	19
105	Entropic lattice Boltzmann method for simulation of binary mixtures. <i>Mathematics and Computers in Simulation</i> , 2006, 72, 79-83.	4.4	18
106	Optimization Strategies for the Entropic Lattice Boltzmann Method. <i>Journal of Scientific Computing</i> , 2007, 30, 369-387.	2.3	18
107	Hyperbolicity of exact hydrodynamics for three-dimensional linearized Grad's equations. <i>Physical Review E</i> , 2007, 76, 022201.	2.1	17
108	Renormalization of the lattice Boltzmann hierarchy. <i>Physical Review E</i> , 2007, 76, 025701.	2.1	17

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109	Entropic lattice Boltzmann simulation of thermal convective turbulence. <i>Computers and Fluids</i> , 2018, 175, 2-19.	2.5	17
110	Thermokinetic lattice Boltzmann model of nonideal fluids. <i>Physical Review E</i> , 2020, 102, 020103.	2.1	17
111	Gradient expansions in kinetic theory of phonons. <i>Physical Review B</i> , 1997, 55, 6324-6329.	3.2	16
112	Validity of a macroscopic description in dilute polymeric solutions. <i>Physical Review E</i> , 2000, 62, 1441-1443.	2.1	16
113	Exact Lattice Boltzmann Equation. <i>Physical Review Letters</i> , 2013, 111, 090601.	7.8	16
114	Ultrarelativistic transport coefficients in two dimensions. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2013, 2013, P02036.	2.3	16
115	Method of invariant grid for model reduction of hydrogen combustion. <i>Proceedings of the Combustion Institute</i> , 2009, 32, 519-526.	3.9	15
116	Rayleigh-Bénard instability in graphene. <i>Physical Review B</i> , 2015, 91, .	3.2	15
117	Entropic multi-relaxation free-energy lattice Boltzmann model for two-phase flows. <i>Europhysics Letters</i> , 2018, 122, 14002.	2.0	15
118	Arbitrary Lagrangian-Eulerian formulation of lattice Boltzmann model for compressible flows on unstructured moving meshes. <i>Physics of Fluids</i> , 2020, 32, .	4.0	15
119	Theory, Analysis, and Applications of the Entropic Lattice Boltzmann Model for Compressible Flows. <i>Entropy</i> , 2020, 22, 370.	2.2	15
120	Consistent lattice Boltzmann model for multicomponent mixtures. <i>Journal of Fluid Mechanics</i> , 2021, 909, .	3.4	15
121	Lattice Boltzmann method for fluid-structure interaction in compressible flow. <i>Physics of Fluids</i> , 2021, 33, .	4.0	14
122	Resummation techniques in the kinetic-theoretical approach to subgrid turbulence modeling. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 280, 92-98.	2.6	13
123	Macroscopic dynamics through coarse-graining: A solvable example. <i>Physical Review E</i> , 2002, 65, 026116.	2.1	13
124	Boundary layer variational principles: A case study. <i>Physical Review E</i> , 2002, 66, 011201.	2.1	13
125	Dynamic mean-field models from a nonequilibrium thermodynamics perspective. <i>Physical Review E</i> , 2003, 68, 016115.	2.1	13
126	Simulation of Droplets Collisions Using Two-Phase Entropic Lattice Boltzmann Method. <i>Journal of Statistical Physics</i> , 2015, 161, 1420-1433.	1.2	13



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127	Entropic multirelaxation-time lattice Boltzmann method for moving and deforming geometries in three dimensions. <i>Physical Review E</i> , 2017, 95, 063306.	2.1	12
128	Energy Conserving Lattice Boltzmann Models for Incompressible Flow Simulations. <i>Communications in Computational Physics</i> , 2013, 13, 603-613.	1.7	11
129	The global relaxation redistribution method for reduction of combustion kinetics. <i>Journal of Chemical Physics</i> , 2014, 141, 044102.	3.0	11
130	Entropy-Assisted Computing of Low-Dissipative Systems. <i>Entropy</i> , 2015, 17, 8099-8110.	2.2	11
131	Complete Galilean invariant lattice Boltzmann models. <i>Computer Physics Communications</i> , 2008, 179, 140-143.	7.5	10
132	Spectral Quasi-Equilibrium Manifold for Chemical Kinetics. <i>Journal of Physical Chemistry A</i> , 2016, 120, 3406-3413.	2.5	10
133	Beyond Navier-Stokes equations: capillarity of ideal gas. <i>Contemporary Physics</i> , 2017, 58, 70-90.	1.8	10
134	Dissipative brackets as a tool for kinetic modeling. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1997, 239, 493-508.	2.6	9
135	Two-step approximation of space-independent relaxation. <i>Transport Theory and Statistical Physics</i> , 1999, 28, 271-296.	0.4	9
136	A dynamic model of tree terminal growth. <i>Canadian Journal of Forest Research</i> , 1993, 23, 326-329.	1.7	8
137	Supersymmetry solution for finitely extensible dumbbell model. <i>Europhysics Letters</i> , 2000, 51, 355-360.	2.0	8
138	Additive generalization of the Boltzmann entropy. <i>Physical Review E</i> , 2003, 67, 067104.	2.1	8
139	Legendre integrators, post-processing and quasiequilibrium. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2004, 120, 149-167.	2.4	8
140	Comment on "Rectangular lattice Boltzmann method". <i>Physical Review E</i> , 2011, 83, 048701.	2.1	8
141	Extended Lattice Boltzmann Model. <i>Entropy</i> , 2021, 23, 475.	2.2	8
142	The Role of Thermodynamics in Model Reduction When Using Invariant Grids. <i>Communications in Computational Physics</i> , 2010, 8, 701-734.	1.7	8
143	Reply to "Comment on 'Invariance principle for extension of hydrodynamics: Nonlinear viscosity'" . <i>Physical Review E</i> , 1998, 57, 3674-3675.	2.1	7
144	A lattice Boltzmann model for reactive mixtures. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2021, 379, 20200402.	3.4	7

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145	Detonation modeling with the particles on demand method. <i>AIP Advances</i> , 2022, 12, 075107.	1.3	7
146	Simplest nonlinear regularization. <i>Transport Theory and Statistical Physics</i> , 1992, 21, 291-293.	0.4	6
147	Comment on "Convective Nonlinearity in Non-Newtonian Fluids": <i>Physical Review Letters</i> , 2001, 86, 744-744.	7.8	6
148	Matrix lattice Boltzmann reloaded. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011, 369, 2202-2210.	3.4	6
149	Multiscale semi-Lagrangian lattice Boltzmann method. <i>Physical Review E</i> , 2021, 103, 063305.	2.1	6
150	Combined micro-macro integration scheme from an invariance principle: application to ferrofluid dynamics. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2004, 120, 33-40.	2.4	5
151	A COMPARISON OF SINGLE-TIME RELAXATION LATTICE BOLTZMANN SCHEMES WITH ENHANCED STABILITY. <i>International Journal of Modern Physics C</i> , 2006, 17, 1375-1390.	1.7	5
152	Derivation of regularized Grad's moment system from kinetic equations: modes, ghosts and non-Markov fluxes. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20170230.	3.4	5
153	Consistent lattice Boltzmann model for reactive mixtures. <i>Journal of Fluid Mechanics</i> , 2022, 941, .	3.4	5
154	Universal expansion of three-particle distribution function. <i>Theoretical and Mathematical Physics(Russian Federation)</i> , 1991, 88, 977-985.	0.9	4
155	Simulations of Heated Bluff-Bodies with the Multi-Speed Entropic Lattice Boltzmann Method. <i>Journal of Statistical Physics</i> , 2015, 161, 1434-1452.	1.2	4
156	Geometry of Irreversibility. , 2003, , 19-43.		4
157	Particles on demand for flows with strong discontinuities. <i>Physical Review E</i> , 2022, 106, .	2.1	4
158	Non-perturbative hydrodynamic limits: A case study. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2014, 403, 189-194.	2.6	3
159	Invariance principle and model reduction for the Fokker-Planck equation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2016, 374, 20160142.	3.4	3
160	Kinetic Simulations of Compressible Non-Ideal Fluids: From Supercritical Flows to Phase-Change and Exotic Behavior. <i>Computation</i> , 2021, 9, 13.	2.0	3
161	Invariance Principle to Decide Between Micro and Macro Computations. , 2003, , 45-52.		3
162	Schrödinger operator in an overfull set. <i>Europhysics Letters</i> , 1998, 42, 113-118.	2.0	2

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163	Dissipative Quantum Dynamics from Wigner Distributions. AIP Conference Proceedings, 2002, , .	0.4	2
164	Adaptive Simplification of Complex Systems: A Review of the Relaxation-Redistribution Approach. Lecture Notes in Computational Science and Engineering, 2011, , 231-240.	0.3	2
165	Technical note: On "solid liquid" limit of hydrodynamic equations. Transport Theory and Statistical Physics, 1995, 24, 1419-1421.	0.4	1
166	Invariance correction to Grad's equations: where to go beyond approximations?. Continuum Mechanics and Thermodynamics, 2005, 17, 311-335.	2.2	1
167	Lattice Boltzmann Method and Kinetic Theory. , 2006, , 403-422.		1
168	SIMULATION OF FLOW PAST A CIRCULAR CYLINDER USING ENTROPIC LATTICE BOLTZMANN METHOD. International Journal of Modern Physics C, 2014, 25, 1340024.	1.7	1
169	Free surface entropic lattice Boltzmann simulations of film condensation on vertical hydrophilic plates. International Journal of Heat and Mass Transfer, 2015, 87, 576-582.	4.8	1
170	Fluid dynamics, soft matter and complex systems: recent results and new methods. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190395.	3.4	1
171	10.1063/5.0062117.1. , 2021, , .		0